

Input Sheet for KSU-Detailed Cow/Calf Budget

Name: _____

Date: _____

Phone Number: _____

Email: _____

The KSU-Detailed Cow/Calf Budget spreadsheet tool is designed to assist a producer in assembling and evaluating an enterprise budget for a beef cow/calf herd that sells calves at weaning or soon after. This input sheet will help you gather the needed information for this budget. If you have multiple cow herds, such as a spring calving and fall calving herd, you will want to do a separate input sheet and budget for each.

Cattle Inventory

List your normal herd inventory of cows, bulls, and replacement heifers. The **number of cows** is a critical input as this is used to determine cost per head.

Number of Breeding Females (Cows & Bred Heifers):	
Number of Bulls:	
Yearling Replacement Heifers:	

Notes:

Anticipated Calving and Sale Quantities

Enter the anticipated calf crop numbers at weaning, their average weight, and the number of replacement heifers you plan to retain. Also enter the number of cows you plan to cull and sell and their average sale weight.

Number of live bull/steer calves at weaning:		Weaning Weight:	
Number of live heifer calves at weaning:		Weaning Weight:	
Number of heifer calves to retain for replacements:			
Number of cows you plan to cull:		Average Weight:	

Notes:

Anticipated Prices

Weaned Steer Calf:	\$ /cwt
Weaned Heifer Calf:	\$ /cwt
Cull Cows:	\$ /cwt

Price forecasting tool:

<https://beefbasis.com>

Pasture:

Rent per acre and the number of acres are required inputs for the enterprise budget. Inventory of animals in each pasture is optional but will assist you in making sure all pasture acres are accounted for and the spreadsheet will calculate values of cost per head and cost per head per day for you.

	Required		Optional			
Name:	Rent per Acre:*	Acres:	# of cows:	# of bulls:	# of heifers:	# of days grazed

**If you own the pasture you can either charge rent based on the going market rental rate to reflect your opportunity cost of grazing it instead of renting it out or you can charge based on your ownership costs (property tax, maintenance, interest on loan, etc.)*

Notes:

Crop Residue & Cover Crops:

Rent per acre and the number of acres are required inputs for the enterprise budget. Inventory of animals in each field is optional but will assist you in making sure all acres are accounted for and the spreadsheet will calculate values of cost per head and cost per head per day for you.

Name:	Rent per Acre*:	Acres:	# of cows:	# of bulls:	# of heifers:	# of days grazed

**Note that if grazing your own fields you could charge a rent to the cow/calf enterprise in various ways. For crop residue, this could be the opportunity cost of what you could rent it to someone else for or nutritional value of the crop residue compared to alternative feedstuffs. For cover crops, this could be a portion of the establishment costs (seed, fertilizer, machinery, etc.) or nutritional value of the cover crop compared to alternative feedstuffs.*

Notes:

Hay/Forage/Feedstuffs:

Feed costs make up the majority of annual production costs, so precision here and in the pasture/crop residue section is important. Thus, these are the most complicated but most critical parts of determining an accurate cost of production. For basic cattle feeding information, including estimating forage intake for cattle, please refer to the K-State Beef Cow Nutrition Guide:

<https://bookstore.ksre.ksu.edu/Item.aspx?catId=562&pubId=183>

List all the types of forage/grain/supplements that you use, the price of each and unit (tons/pounds/bushels/cwt) that the listed price is in. If you are raising some of your feed inputs (such as hay), the easiest way to account for that cost is to price the feedstuff at the current market rate. Essentially, hay or other raised feedstuffs become their own enterprise with their own profitability using this method and the cow herd is charged the same rate as if you were purchasing the feed inputs. The other option is to price the feedstuff at how much it cost you to produce it; factoring in seed, fertilizer, chemical, machinery, labor, etc.

Type of Feed:	Price:	Unit price is in:

Hay/Forage/Feedstuffs:

List the amount of each feed that is fed to each type of animal (cows, bulls, heifers), the pounds per day that will be delivered to them and the number of days. You can list the same feed multiple times if pounds fed changes throughout the year. Attach additional pages if necessary.

Cows:			
Feed Name:	Pounds per day (As Fed)	# of days	Notes:
Bulls:			
Feed Name:	Pounds per day (As Fed)	# of days	Notes:
Yearling Heifers:			
Feed Name:	Pounds per day (As Fed)	# of days	Notes:

Veterinary Care and Pharmaceuticals:

	Cost per Head	Head
Annual Cow Vaccination/Parasite Control Cost		
Annual Bull Vaccination/Parasite Control Cost		
Heifer Vaccination/Parasite Control Cost		
Calf Vaccination/Parasite Control Cost		
Annual Bull Breeding Soundness Exam		
Misc. Drugs and Emergency Vet Bills (total)		

Notes:

Marketing/Sale Barn Fees:

(including commission, yardage, insurance, advertising, trucking, etc.)

	Cost	Head
Calf Sales Commission (per head)		
Cull Cow Sales Commission (per head)		
Other Marketing fees (total)		

Notes:

Bull and/or A.I. Costs:

Bull Cost	
Average Purchase Price	
Average Cull Value	
Average Number of Years Used	

Notes:

A.I. Cost		
Product	Cost per Head	# of Head
Synchronization		
Semen		
A.I. Tech fee & Chute charge		
Other		

Notes:

Hired Labor:

Enter annual salary of any hired employees, including wages and any other fringe benefits, making sure that you only include their time that is spent with the cow herd. For example, if an employee spends half their time with the cow herd and half their time with cropping enterprises, charge only half of their annual salary. Do the same for hourly employees by entering the appropriate number of hours and hourly rate that they contribute to the cow herd. Operator labor is not included on this budget as an expense, making the return from the cowherd the return to the operator for their labor and management.

Hired Labor	
Annual Salary	
and/or	
Hours per year	
Dollars per hour	

Notes:

Machinery/Equipment Depreciation:

This represents an overhead cost for the loss in value of these assets because of use and aging each year. This is not tax depreciation. Enter each piece of equipment or building, the current value, loan value if financed (used for interest cost in the next section), and what percent of that asset is used for the cow herd (for example a tractor may be used half of the time for the cow herd and half the time for cropping enterprises). List only assets directly used in the cow herd. Items such as haying equipment should not be listed as hay is charged to the cow herd based on its market value.

Equipment/Building Name	Current Value	Outstanding Loan Balance	% Used for Cow/Calf Operation

Interest Costs:

This is a direct cash costs for the interest due on loans directly used for the cow herd. Principle payments on the loans are not included. If there is an operating loan used for multiple enterprises on the farm, estimate the amount of that loan that actually is used for cow herd inputs. The cattle loan line would be for any loan used in purchasing cows, bulls, or heifers. Machinery and Equipment loan line should be the sum of "outstanding loan balance" in the depreciation table above. Finally, land loan interest can be charged to the cow herd for owned pasture acres if this was not already captured in the per acre rental rate in the "Pasture" tab.

	Current Balance	Annual Interest Rate
Cattle Operating Loan(s)		
Cattle Ownership Loan(s)		
Machinery/Equipment Loan(s)		
Land Loan(s)		
Other		

Raised Replacement Heifers:

Are you purchasing Replacement Heifers? YES NO

This information is only needed if purchasing replacement heifers instead of raising them. If raising replacements heifers, costs are already captured in reduced heifer calf income and cost of raising heifers. The values below are used to determine "Replacement Heifer Cost" in the budget, representing the actual cash cost of buying the animals. "Cow Depreciation" in the budget represents the loss in value of those animals throughout their time in the cow herd. Their cull value is already captured in income.

If yes:

Cost of Purchased Replacement Heifer	
Number of Replacement Heifers Purchased per year	
Average Years in Herd	

Notes:

Overhead Costs:

Overhead costs are other expense items that you will have on a yearly basis. These items need to be estimated on the whole-herd level. A good way to estimate these costs if you do not have records of them directly is to look at the last 3 years of your Schedule F tax return and use an average value that reflects what is the actual cost for the cow herd. For example, farm utilities on the Schedule F can be averaged for the last 3 years and then 25% (or whatever value is appropriate) be charged to the cow herd.

Item:	Total Cost for Herd per Year
Machinery, Facility/Equip. Repairs	
Utilities	
Fuel	
Taxes	
Farm/Livestock Insurance	
Other costs	

Now you are ready to enter these values into the KSU-Detailed Cow/Calf Budget and evaluate your income, costs, and profitability.

The spreadsheet and tutorial video are available here:

<https://www.agmanager.info/farm-mgmt-guides/livestock-budgets/ksu-detailed-cow-calf-budget>